

**In the Claims:**

Please amend the claims as follows:

1. (currently amended) A computer-implemented method comprising:  
consolidating data organized into records and items, such that each record has a value for each item, into a plurality of groups summarized by a plurality of ~~probability~~ models wherein a model for a group is defined by a plurality of data points having a value in a range and that are determined from a plurality of data records from the group which indicate a probability of observing a value of [1] for an item within the group ~~derived from item values~~;  
based on the plurality of groups, determining a predicted vote for a particular record and a particular item using a similarity scoring approach that reflects likelihood similarity between at least one ~~probability~~ model that summarizes one group of the plurality of groups and the particular record; and  
outputting the predicted vote for the particular record and the particular item.
2. (original) The method of claim 1, wherein consolidating the data into the plurality of groups comprises consolidating the data into a plurality of clusters.
3. (original) The method of claim 1, wherein consolidating the data into the plurality of groups comprises consolidating the data into a plurality of descriptors.
4. (original) The method of claim 1, wherein each record is referred to as at least one of: a row, and a user.
5. (original) The method of claim 1, wherein each item is referred to as at least one of: a column, and a dimension.
6. (original) The method of claim 1, wherein each record comprises a user, and each item comprises a product, such that determining the predicted vote for the particular record and

the particular item comprises determining whether a particular user will purchase a particular product.

7. (original) The method of claim 1, wherein each record comprises a user, and each item comprises a web page, such that determining the predicted vote for the particular record and the particular item comprises determining whether a particular user will view a particular web page.

Claims 8-9 (cancelled)

10. (currently amended) A computer-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

consolidating data organized into records and items, such that each record has a value for each item, into a plurality of groups summarized by a plurality of ~~probability~~ models wherein a model for a group is defined by a plurality of data elements having a value in a range and that are determined from a plurality of data records from the group which indicate a probability of observing a value of [1] for an item within the group derived from item values; and

based on the plurality of groups, determining a predicted vote for a particular record and a particular item using a likelihood similarity scoring ~~approach~~ or a correlation similarity scoring ~~approach~~ between the particular record and one ~~probability~~ model that summarizes one group of the plurality of groups.

11. (original) The medium of claim 10, the method further comprising outputting the predicted vote for the particular record and the particular item.

12. (original) The medium of claim 10, wherein consolidating the data into the plurality of groups comprises consolidating the data into one of: a plurality of clusters, and a plurality of descriptors.

13. (original) The medium of claim 10, wherein each record is referred to as at least one of: a row, and a user.

14. (original) The medium of claim 10, wherein each item is referred to as at least one of: a column, and a dimension.

Claim 15 (cancelled)

16. (currently amended) A computer-implemented method operable on data organized into records and items, such each record has a value for each item, the data also consolidated into a plurality of clusters summarized by a plurality of ~~probability~~ models wherein a model for a cluster is defined by a plurality of data elements having a value in the range and that are determined from a plurality of data records from the cluster which indicate a probability of observing a value of [1] for an item within the group ~~derived from item values~~, the method comprising:

based on the plurality of clusters, determining a predicted vote for a particular record and a particular item using a likelihood similarity scoring ~~approach~~ or a correlation similarity scoring ~~approach~~ between the particular record and one ~~probability~~ model that summarizes one cluster of the plurality of clusters; and

outputting the predicted vote for the particular record and the particular item.

17. (original) The method of claim 16, wherein each record comprises a user, and each item comprises a product, such that determining the predicted vote for the particular record and the particular item comprises determining whether a particular user will purchase a particular product.

18. (original) The method of claim 16, wherein each record comprises a user, and each item comprises a web page, such that determining the predicted vote for the particular record and the particular item comprises determining whether a particular user will view a particular web page.

Claim 19 (cancelled)

20. (currently amended) A computer-implemented method operable on data organized into records and items, such each record has a value for each item, the data also consolidated into a plurality of descriptors summarized by a plurality of ~~probability~~ models wherein a model for a descriptor comprises a plurality of data elements having a value in a range and that are determined from a plurality of data records that define the descriptor which indicate a probability of observing a value of [1] for an item ~~derived from item values~~, the method comprising:

based on the plurality of descriptors, determining a predicted vote for a particular record and a particular item using a correlation similarity scoring ~~approach~~ that finds a similarity between the particular record and one ~~probability~~ model that summarizes one descriptor of the plurality of descriptors; and

outputting the predicted vote for the particular record and the particular item.

21. (original) The method of claim 20, wherein each record comprises a user, and each item comprises a product, such that determining the predicted vote for the particular record and the particular item comprises determining whether a particular user will purchase a particular product.

22. (original) The method of claim 20, wherein each record comprises a user, and each item comprises a web page, such that determining the predicted vote for the particular record and the particular item comprises determining whether a particular user will view a particular web page.

Claim 23 (cancelled)

24. (previously presented) The method of claim 1 wherein the particular record is contained within the records that are organized into groups and wherein a probability that a given group contains the particular record is used to reflect likelihood similarity.

25. (previously presented) The computer-readable medium of claim 10 wherein the

particular record is contained within the records that are organized into groups and wherein a probability that a given group contains the particular record is used as the correlation similarity.

26. (previously presented) The method of claim 16 wherein the particular record is contained within the records that are consolidated into clusters and wherein a probability that a given cluster contains the particular record is used to reflect correlation similarity scoring.

27. (previously presented) The computer implemented method of claim 20 wherein the particular record is contained within the records that are consolidated into clusters and wherein a probability that a given cluster contains the particular record is used to find similarity between the particular record and one of the plurality of clusters.

28. (currently amended) A computer-implemented method comprising:  
consolidating data organized into records and items, such that each record has a value for each item, into a plurality of groups summarized by a plurality of ~~probability~~ models wherein said probability model for a group comprises a plurality of data elements having a value in a range and that are determined from a plurality of data records that define the group which indicate a probability of observing a value ~~derived from item values~~;

based on the plurality of groups, determining a predicted vote for a particular record and a particular item using a similarity scoring approach that reflects correlation similarity between ~~at least one probability~~ model that summarizes one group of the plurality of groups and the particular record; and

outputting the predicted vote for the particular record and the particular item.

29. (currently amended) The method of claim 1, wherein said probability model for a group is defined by a plurality of data points having a value in the range of [0,1] ~~determined from a plurality of data records from the group which indicate a probability of observing a value of [1] for an item within the group.~~

30. (currently amended) The computer readable medium of claim 10, wherein said probability model for a group is defined by a plurality of data elements having a value in the

range of  $[0,1]$  ~~determined from a plurality of data records from the group which indicate a probability of observing a value of  $\{1\}$  for an item within the group.~~

31. (currently amended) The method of claim 16, wherein said probability model for a cluster is defined by a plurality of data elements having a value in the range of  $[0,1]$  ~~determined from a plurality of data records from the cluster points which indicate a probability of observing a value of  $\{1\}$  for an item within the group.~~

32. (currently amended) The method of claim 20, wherein said probability model for a descriptor comprises a plurality of data elements having a value in the range of  $[0,1]$  ~~determined from a plurality of data records that define the descriptor which indicate a probability of observing a value of  $\{1\}$  for an item.~~

33. (currently amended) The method of claim 28, wherein said probability model for a group comprises a plurality of data elements having a value in the range of  $[0,1]$  ~~determined from a plurality of data records that define the group which indicate a probability of observing a value.~~